

# Agency IT Strategic Plan

Secretariat: Education

Agency Code: 146

Agency: The Science Museum of Virginia

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## Agency Profile & Strategic Direction

### Agency Mission Statement:

The mission of the Science Museum of Virginia is to raise public understanding of science and technology throughout the Commonwealth. With a variety of delivery vehicles, including operation of a large, nationally acclaimed system of science centers at multiple locations across the Commonwealth, the SMV seeks to engage children, adults, and teachers of science in activities that promote science literacy and enhance public understanding.

### Agency IT Vision Statement:

The vision of the Science Museum of Virginia is to be the leader and premier center of experiential science learning in Virginia, and to be recognized by constituents and peers as one of the world's great science centers systems.

The IT vision is to develop, support, and provide reliable technical solutions; aligned with the SMV's mission and the mission of other constituents like The SMV's Foundation, Virginia Academy of Sciences, Virginia Science Resource Network, Virginia Science Education Leadership Association, Virginia Mathematics and Science Coalition and similar partners. SMV currently uses technology in almost every aspect of its business and must stay on the leading edge. The use of technology continues to grow and develop with the release of new technologies and initiatives. SMV will continue to use these specialized and unique technologies to be recognized as one of the world's great science centers.

Continue to develop and support internet based applications and business for all SMV's customers. Create a single portal for all customers for accessing any/all data. Some examples would be educational material, electronic business (ticketing, facility rentals, retail store, membership, and fund development), teacher resources, member resources, multimedia training, educational material, reservations, and demographic data.

Provide virtual access to exhibits, educational material, facilities, and campus. Use of wireless devices capturing data, planning/adjusting scheduled visitations, report problems, and education.

Use Internet II and other networks to provide/ capture programs and courses with the education community. Continue to increase and enhance the use of real time video distribution over IP and microwave links.

Provide more ticketing and retail store options including remote kiosks, bar coded tickets (e-business and at-the-gate), stripped membership cards and gift cards.

Continued development and research new technologies for the campus wide secure network for all SMV's locations and partners. Continue to use and develop secure wireless access throughout campus.

Increase the data storage and security options for all customers.

Develop smart exhibits and networked appliances allowing customers to tap into all campus and SMV resources from any location while capturing valuable customer feedback.

Develop technical partnerships with all constituents providing a reliable and complete system for all with an interest in science education. This would include sharing of technical resources, systems, and development of new initiatives.

Increase the training opportunities for IT staff and volunteers while also recruiting more volunteers and interns.

Develop additional funding sources for IT initiatives; SMV currently relies on the private sector to fund many IT projects. The goal is to continue to research new funding sources for IT projects.

Total Employees:

85

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Total IT Employees: 3

Project Selection Criteria:

Since all of SMV's projects to date are considered low level with with generally small investments. SMV lists a few basic guidelines when deciding on a projects feasibility.

- customer commitment to the project
- inlign with SMV's goals and objectives
- profitability impact in terms of cost savings
- fund availability
- improves business processes (time)
- meeting project technical requirements
- provides a cost competitive solution
- integrates with existing technology
- can complete the project on schedule and within budget
- meets Commonwealth's standards and requirements

Business Case Development:

The SMV currently has three IT staff that share a large amount of time on non-standard technical issues. SMV current plans replace IT equipment on a three year life cycle.

SMV has strict guidelines and controls in place to accomplish projects. Accurate inventory and procurement documentation are maintained throughout all projects. Current staff is cross trained at a high technical level; across a variety of different technologies.

A list of resources needed to complete the project, such as staff, hardware, software, print materials, time, budget, and so forth is developed. All projects selected need to have secured funding sources with funding for additional staffing as required. If completed project needs additional support then funding must be identified .Projects must have a reasonable ROI. Project alternatives are pursued and compared with the planned project to insure effectiveness. A detailed action planned is laid out including ramp-up time, training costs, and project delays.

Risk Assessment Methodologies:

Since all of SMV's projects to date are considered low level with with generally small investments, SMV provides internal audits for risk assessment. A small group of IT, end user, financial, and management persons assess each project to insure it meets the necessary project selection criteria. The same audit group meets during the projects life to ensure the project is still on track and should continue without risk to the SMV.

Prioritization Schema:

Since all of SMV's projects to date are considered low level with generally small investments, SMV uses the same audit group which provided the projects risk assessment to prioritize projects. The group or subsets of the group meet to decide which projects grade the highest on meeting the selection criteria. The same audit group meets during the projects life and adjusts priority; aligned with the SMV's goals and objectives.

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## Core Business Activities:

Core Business Activity Title	Core Business Activity Description	Core Business Activity Sub-Function Title	Core Business Activity Sub-Function Description
CULTURAL AND SCIENCE EDUCATION	Efforts to provide and promote opportunity for citizens to expand their knowledge, skills, and cultural awareness through science, art, music, drama, literature, dance, and other educational services.	Museum and Cultural Services	Efforts to promote education in and appreciation of the arts, science, and history.

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## Key Customers Associated With Each Core Business Activity :

Core Business Activity Title	Core Business Activity Description	Core Business Activity Sub-Function Title	Core Business Activity Sub-Function Description
CULTURAL AND SCIENCE EDUCATION	Efforts to provide and promote opportunity for citizens to expand their knowledge, skills, and cultural awareness through science, art, music, drama, literature, dance, and other educational services.	Museum and Cultural Services	Efforts to promote education in and appreciation of the arts, science, and history.
Key Customers			
Buyers of Services			
Donor-Patrons and Partners (supporters of science education, including taxpayers, the General Assembly and Administration, as well as private individuals and corporations with a stake in science education).			
Providers of Science Education: Teachers; K-12 schools, community colleges, and universities; home schoolers; staff and volunteers			
Seekers of Science Education: students and adults; tourists.			

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## Key Activities and Associated Outcomes:

<u>Key Activity</u>	<u>Associated Outcome</u>
Develop our institutional resources in a balanced well-planned program for the future	We will develop our people, our property and facilities, our intellectual property, our financial resources, and our brand and reputation in a balanced way for the fulfillment of our mission
Provide a statewide science center network and equity of access for all citizens.	<p>We will create a hands-on science center within a one-hour drive of most Virginians:</p> <p>We will complete the Belmont Bay Science Center, support the formation of a hands-on science center in Bristol, Virginia, support the formation of a hands-on science center in the Staunton-Harrisonburg, Va.</p> <p>We will deliver and use Museum assets throughout Virginia: We will establish a traveling exhibit program, a Virginia association of science centers, traveling school vans based outside of Richmond (Danville).</p> <p>We will actively collaborate with the colleges and universities of Virginia.</p> <p>We will increase accessibility for disabled and underserved citizens to science exhibits and programs:</p> <p>We will provide programs tailored to inner city students and to rural Virginia and we will provide access for the disabled to programs and exhibits.</p> <p>We will operate and develop the Danville Science Center, the Virginia Aviation Museum, and the Rice RiverCenter.</p>
To operate a world-class hands-on interactive science center in the Broad Street Station.	<p>An Outstanding Facility:</p> <p>We will strive for cleanliness, safety and ease of use by visitors. We will create an attractive campus.</p> <p>Develop the campus:</p> <p>We will develop the campus and facilities of which we are stewards.</p> <p>Maintain and increase attendance:</p> <p>We will market and promote attractive and varied offerings using value pricing.</p>

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To operate a world-class hands-on interactive science center in the Broad Street Station.

## Outstanding Exhibitions

Exhibits: will be well-maintained, frequently refurbished, and regularly replaced. We will use best practice design, and regularly schedule new exhibition openings

## Outstanding Public Programs:

We will provide strong, frequent gallery demonstrations, instruction, and events, with staff and volunteer interpreters in the galleries, and use well-chosen large-format films, theater presentations, planetarium shows and multimedia shows.

## Outstanding Visitor Experience:

We will give a warm welcome to all, attempt to understand and fulfill expectations, to surprise and delight our visitors and create a memorable experiences

To provide quality science education programs

Provide for evaluation of exhibits and programs at all museum sites: We will evaluate exhibits using formative evaluation in development and periodic re-evaluation for modification of function or graphics.

Provide for evaluation of exhibits and programs at all museum sites: We will evaluate programs on expressed customer needs, program net income, learning research, program effectiveness, and pre and post program assessments.

Provide quality opportunities for lifelong learning in science: We will provide adult lecture and program events, educational tours, early childhood science experiences, and timely access to current science research and issues.

Provide stimulating science-learning experiences:

We will use large format films, planetarium shows, and live theater techniques to create powerful science-learning environments, and apply distance learning technologies.

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To provide quality science education programs	<p>Provide support for Virginia's Science Standards of Learning (SSOL), and related standards such as the Benchmarks for Science Literacy: We will provide SSOL-keyed curriculum materials and instruction, SSOL links to museum exhibits and programs, and policy support and advocacy for the SSOL's.</p> <p>Quality science content for Museum exhibitions: We will use Content Area Teams, chaired by a scientist to assure quality science content.</p> <p>Support for teachers in the formal education system: We will provide teacher training in effective hands-on classroom techniques and technology and in-classroom support (outreach) for enrichment and instruction.</p> <p>Support for teachers in the formal education system: We will connect the science community and the classroom by operating the Virginia Science Resource Network, operate a science and technology resource center, and apply contemporary tools and technologies to content instruction</p>
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## Major IT Projects

Approved for Preliminary Planning — The following project(s) scheduled for initiation in the 2004-2006 Budget Biennium is (are) approved for inclusion in your IT Strategic Plan. A project proposal must be submitted to the CIO before the project(s) will be considered for planning approval. Procurements in support of the project(s) are not approved for submission to the VITA Project Management Division (PMD) for execution until the project has been Approved for Planning by the CIO. For detailed instructions refer to the Interim Procedures for the Initiation and Approval of Major and Non-major Information Technology Projects.

<http://www.vita.virginia.gov/projects/cpm/cpmDocs/projectInitInterimProcs030903.doc>

There are no major projects approved for preliminary planning.

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Approved for Planning — The following project(s) scheduled for initiation in the 2004-2006 Budget Biennium is (are) approved for planning. This approval constitutes authorization to undertake the planning necessary to complete a detailed project proposal and project charter for consideration by the Secretariat Oversight Committee and the CIO. Projects "Approved for Planning" must be formally approved for development by the Commonwealth IT Investment Board prior to beginning Phase 3 of the project lifecycle (Project Planning) and execution as defined in the Commonwealth Project Management Guideline. Procurements in support of developing the detailed project proposal and charter are approved for submission to the VITA Project Management Division (PMD) for execution, in accordance with PMD procedures. For detailed instructions refer to the Interim Procedures for the Initiation and Approval of Major and Non-major Information Technology Projects.

<http://www.vita.virginia.gov/projects/cpm/cpmDocs/projectInitInterimProcs030903.doc>

There are no major projects approved for planning.

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Active Projects — The following project(s) are(is) scheduled to continue in the 2004-2006 Budget Biennium as an Active Project. All Active Projects must be tracked on the Commonwealth Information Technology Major Projects Dashboard and are subject to monthly review by the CIO. The CIO is authorized to assess progress of all Active Projects and recommend termination of a project to the Commonwealth IT Investment Board.

There are no major projects in the active projects category.

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Collaboration Opportunity — The following project(s) is (are) designated as a Collaboration Opportunity. Your agency should consult with the other agencies listed on the corresponding collaboration report and evaluate whether collaboration between agencies on these projects is feasible. The results of your collaboration efforts and evaluation should be reported when the project is presented to the Commonwealth IT Investment Board for "Development Approval".

There are no collaboration opportunity projects.

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## Major IT Procurements

Approved Major IT Procurements - The following major procurements are approved for submission to the VITA Project Management Division (PMD) for execution in accordance with PMD procedures.

There are no approved major procurements.

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Disapproved Major IT Procurements - The following major procurements are not approved for submission to the VITA Project Management Division (PMD). The agency should not take any action on the major procurements listed below.

There are no disapproved major procurements.

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## Non-major IT Projects

Approved for Planning— The following project(s) scheduled for initiation in the 2004-2006 Budget Biennium is (are) approved for planning. This approval constitutes authorization to undertake the planning necessary to complete a detailed project proposal and project charter for consideration by the CIO. Projects "Approved for Planning" must be formally approved for development by the CIO prior to beginning Phase 3 of the project lifecycle (Project Planning) and execution as defined in the Commonwealth Project Management Guideline. Procurements in support of developing the detailed project proposal and charter are approved for submission to the VITA Project Management Division (PMD) for execution, in accordance with PMD procedures. For detailed instructions refer to the Interim Procedures for the Initiation and Approval of Major and Non-major Information Technology Projects.

<http://www.vita.virginia.gov/projects/cpm/cpmDocs/projectInitInterimProcs030903.doc>

Project Formal Title	Planned Start Date	Planned Completion Date	Estimate At Completion
Belmont Bay	06/01/2005	10/01/2005	\$160,000.00

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## Non-major IT Procurements

Approved Non-major IT Procurements - The following non-major procurements are approved for submission to the VITA Project Management Division (PMD) for execution in accordance with PMD procedures.

Procurement Description	Planned Procurement Delivery Date	Estimated Procurement Cost
Computer Equipment ( desktop, Point of Sale, Retail Store )	06/01/2005	\$80,000
Network and Telecomm Equipment ( Fiber, Wired, Wireless, Switches, WAN to SMV )	06/01/2005	\$80,000

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Disapproved Non-major IT Procurements - The following non-major procurements are not approved for submission to the VITA Project Management Division (PMD). The agency should not take any action on the major procurements listed below.

There are no disapproved non-major procurements.